



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,155	10/16/2001	Rodney Scott Armentrout	71418	5616

7590

08/21/2003

Cheryl J. Tubach  
Eastman Chemical Company  
P.O. Box 511  
Kingsport, TN 37662-5075

9  
EXAMINER

MULLIS, JEFFREY C

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 08/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/981,155

Applicant(s)

ARMENTROUT ET AL.

Examiner

Jeffrey C. Mullis

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 11-13 and 23-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 14-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

Art Unit 1711

All remaining rejections and/or objections follow.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) The invention was described in (1) an application for patent, published under Section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 14-22 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McNamara et al. (USP 6,444,758).

Art Unit 1711

See the previous Office action at page 8 line 4 - page 9 line 5 and page 9 line 14 et seq.

Applicants' arguments filed 6-10-03 have been fully considered but they are not deemed to be persuasive.

Applicants argue that their "novel copolymers do not include a hyperbranch polymer or oligomer". However there is nothing in the claims excluding such moieties. The claims require a block copolymer and the oligomer and hyperbranch polymer from which McNamara's form part of the "block copolymer" referred to in the Abstract of McNamara. Since applicants also require a block copolymer, the materials of McNamara containing the hyperbranch polymer or oligomer meet the limitations of the claims. Again there is nothing in the claims excluding such moieties.

Applicants argue that "the terminal ester group containing at least one free carboxyl group would not be considered by those in the art as being a lipophilic end group". While admittedly the moieties derived from for instance "maleic anhydride" disclosed by McNamara would only be considered lipophilic when using a fairly broad definition for the term "lipophilic", clearly McNamara includes maleic anhydride as the lipophilic generating groups as set out in the paragraph bridging columns 6 and 7 of McNamara. Those skilled in the art reading McNamara would conclude that McNamara certainly considered maleic anhydride as usable in the process of McNamara. Although they would also

Art Unit 1711

conclude that McNamara's definition of the term "lipophilic" is very broad, nonetheless there seems to be little doubt that McNamara considered maleic anhydride as a usable material given the disclosure at the paragraph bridging columns 6 and 7. In any case even if maleic anhydride was not disclosed by McNamara, McNamara's Example 1 which does not utilize anhydrides such as maleic anhydride or any other anhydride or diacid is disclosed to have an "acid number". Note Example 1 and in particular column 22 line 41 in this regard. It would reasonably appear that the acid number of McNamara et al. is derived from the acidic monomers used in the process of McNamara. For instance in Example 1 dimethylol propionic acid would read on applicants' end capping reagent.

Applicants argue that McNamara conducts his reaction until the acid number of his products show little appreciable decrease. Applicants conclude that McNamara discloses and teaches hyperbranch polymers having relatively low acid numbers. While this may well be true, the instant claims are not limited as to any particular acid number either explicitly or inherently. While it may well be true that McNamara et al. desire low acid numbers, this is immaterial to any limitation present in the claims given that the instant claims recite that as little as about 0.01% of the end capping reagent may be used.

Art Unit 1711

Applicants argue that the acid capped IDP's of the present invention do not bloom to the surface as described by McNamara. However there is nothing in the claims regarding such a limitation.

Applicants argue that claim 21 is patentable since the required alloy is not disclosed. However as set out in the above rejection, polyesters may be blended with polystyrene and combined with McNamara's block copolymers. It is noted that polystyrenes meet the limitations of claim 21 and therefore it is immaterial whether the specific polyester of claim 22 is present given that claim 22 does not even require a polyester but merely requires that the polyester of claim 21 (which is not required when polystyrene is present) be the specific polyester of claim 22.

**THIS ACTION IS MADE FINAL.** Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a). The practice of automatically extending the shortened statutory period an additional month upon the filing of a timely first response to a final rejection has been discontinued by the Office. See 1021 TMOG 35.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION

Serial No. 09/981,155

-6-

Art Unit 1711

IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Mullis whose telephone number is (703) 308-2820. The examiner can normally be reached on Monday-Friday from 9:30 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on (703) 308-2462. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2351.

J. Mullis:cdc

August 15, 2003

Jeffrey Mullis  
Primary Examiner  
Art Unit 1711

